

## ABSTRACT OF THE DISCLOSURE

A first delay line for forward pulses and a second delay line for backward pulses are composed of unit delay elements. A state holding section determines the input position of a backward pulse on the second delay line according to the transfer position of a forward pulse transferred along the first delay line. In the unit delay elements constituting the first and second delay lines, the accuracy of synchronization can be improved by increasing the current driving capability of the transistors related to the rising of the pulse signal.